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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,707	06/15/2001	Michael W. Bezera	40921/257479	9367

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DURHAM, NC 27713

EXAMINER

BADERMAN, SCOTT T

ART UNIT	PAPER NUMBER
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2113

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/882,707

Applicant(s)

BEZERA ET AL.

Examiner

Scott T Baderman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-17 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 15 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2 and 5-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Huang et al (US 2001/0052084 A1).

As in claims 1, 12 and 17, Huang discloses a method and system for selectively recovering nodes on a computer network having a plurality of paths connected to adapters (NICs) on at least one host computer (Manager node, Figure 2) for managing I/O requests between the host computer and fiber channel devices (nodes) having a plurality of logical units associated therewith (inherent in nodes, Figure 3B) (Figures 2, 3B, Abstract, page 2: paragraph 20) that comprises detecting (by certain nodes, which inherently include an operating system, see Figure 3B, Abstract) an exception condition (failure), recovering only the adapters, fiber channel devices and logical units (all part of each node, see Figures 1, 2 and 7, page 8: paragraphs 100-104) within the scope of the exception condition (i.e., nodes that detect a failure), and issuing I/O requests (nodes in a network continually receive I/O requests) to adapters, fiber channel devices

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and logical units during recovery that are not within the scope of the exception condition (i.e., nodes that do not detect a failure) (Abstract, page 2: paragraph 20).

As in claim 2, Huang discloses the method above. Huang further discloses that if an adapter (NIC) on an active channel has failed, then the adapter is recovered by swapping to an adapter (NIC) connected to a standby channel (Figures 1A-B, 2 and 7, page 8: paragraphs 100-104). Since Huang implies that the flow of data through the network first goes through the adapter then the fiber channel device and then the logical unit (Figures 2, 3B and 7), it would be essential to recover the adapter before recovering the fiber channel device and logical unit (within the fiber channel device) associated with the adapter.

As in claim 5, Huang discloses that an adapter (NIC), attached to an active channel, is in an unrecoverable state since a maximum number of allowed message losses is exceeded (Figures 1A-B, 2 and 7, page 3: paragraph 24). Huang further discloses that when a maximum number of allowed message losses is exceeded, the adapter (NIC) attached to the standby channel must be swapped to (page 8: paragraphs 100-104). It is interpreted that since the adapter attached to the active channel is considered unrecoverable, the fiber channel device and its associated logical unit connected to the unrecoverable adapter are also considered unrecoverable until the adapter attached to the standby channel is swapped to (which only happens after the maximum number of allowed message losses has been exceeded).

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As in claim 6, Huang discloses that the adapter (NIC) is in an unrecoverable state if adapter recovery is not successful (i.e., when a maximum number of allowed message losses is exceeded) (Figures 1A-B, 2 and 7, page 3: paragraph 24).

As in claims 7, 8 and 9, it is interpreted that since the adapter attached to the active channel is considered unrecoverable when a maximum number of allowed message losses is exceeded (see claim 5 above), the fiber channel device and its associated logical unit connected to the unrecoverable adapter are also considered unrecoverable until the adapter attached to the standby channel is swapped to (which only happens after the maximum number of allowed message losses has been exceeded).

As in claim 10, Huang discloses that if a maximum number of allowed message losses is exceeded (interpreted as a number of retry times in a time period), then the adapter (NIC), and therefore its associated fiber channel device and logical unit, are considered unrecoverable (Figures 1A-B, 2 and 7, page 3: paragraph 24, page 8: paragraphs 100-104).

As in claim 11, Huang discloses that the computer network includes a fabric switch (Figures 1B, 2 and 7).

As in claim 13, the Applicant is directed to claim 2 above.

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As in claim 14, the Applicant is directed to claims 2 and 5 above, wherein it is interpreted that until the adapter (NIC) attached to the standby channel is swapped to, the node is considered unrecoverable, and all associated nodes will be impacted as well (page 3: paragraph 24).

As in claim 15, the Applicant is directed to claims 7-10 above.

As in claim 16, the Applicant is directed to claim 6 above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al..

As in claim 3, Huang discloses the method in claim 2 above. However, Huang does not specifically disclose recovering the fiber channel device and logical unit associated with the adapter.

It would have been obvious to a person skilled in the art at the time the invention was made to include recovering the fiber channel device and logical unit associated with the adapter

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into the method taught by Huang above. This would have been obvious because Huang specifically discloses implementing a time-out process to monitor if a node is still "alive" in the network (page 7: paragraphs 81-86). A common practice in the art, when a time-out occurs, is to reset the device in order to attempt a recovery of the device. A person skilled in the art would have understood this process and would have been led to include this process into the method taught by Huang above.

Regarding the recovery of the fiber channel device before the recovery of its associated logical unit, Huang implies that the flow of data through the network first goes through the adapter then the fiber channel device and then the logical unit (Figures 2, 3B and 7). It would be essential to recover the fiber channel device before recovering the logical unit (within the fiber channel device).

As in claim 4, Huang discloses the method in claim 3 above. Based on the rationale in claims 2 and 3 above, it would have also been obvious to recover the logical unit only after the adapter and fiber channel device are recovered since the logical unit is the last component to receive the data.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


See Form PTO-892.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott T Baderman whose telephone number is (703) 305-4644. The examiner can normally be reached on Monday-Friday, 6:45 AM-4:15 PM, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott T Baderman
Primary Examiner
Art Unit 2113

STB